

INTERNATIONAL CITY MANAGERS' ASSOCIATION
1313 EAST 60TH STREET - CHICAGO 37, ILLINOIS

Report
107 Dec.-'52

This report was prepared in response to an inquiry from a municipality subscribing to this Service and is distributed to all subscribers. The contents may not be reproduced without permission.

Route To:

Return To:

MUNICIPAL POLICY FOR CONTROL OF STREET OPENINGS

What municipal policies and procedures should govern street openings, curb cuts, service driveways, and sidewalk construction and maintenance?

The poor condition of city streets often can be attributed directly to lack of municipal control over street openings, curb cuts and service driveways, and sidewalks. An inadequate or poorly administered program for complete control of the entire street width between the property lines results in scarred, rough, irregular, and improperly drained streets. The city should at all times control all structures located under, on, or above the surface of the street right-of-way.

Hastily designed driveways, haphazard installation of utilities and services, and poorly constructed or damaged sidewalks can destroy the efforts of a city to provide safe, convenient, and properly maintained roadways. Improperly made street openings and curb cuts can undermine the pavement, make extensive repairs necessary, and hamper smooth traffic movement. Inadequate control of the streets leaves the city open to law suits for accidents caused by improper maintenance of the roadway or the sidewalk.

To obtain information on how cities are controlling street openings and pavement restorations, MIS surveyed 19 cities of different sizes and in different parts of the country, and the returns are described in this report and summarized in the table at the end of the report. In addition MIS Report Nos. 20 and 93 on curb cuts, service driveways, and sidewalks are summarized and brought up to date.

Control of Street Openings. Plumbers, building contractors, utility companies, and city water and sewer departments make most of the street openings in the average city. Openings are made usually to connect the utilities, to extend lines to new areas, and to repair or replace mains. Sewers, water and gas mains, electrical conduits and wires, telephone cables, valves, and manholes are some of the structures which are buried in the street or parking or are strung on poles alongside the roadway.

The city should have up-to-date maps showing the location of all utility lines, valves, mains, connections, and other structures. Such information is essential to prevent injury to workmen or damage to property. Without this information any cutting into the streets could set a damaging fire by cutting a gas main or flood the area by breaking a water main.

Six methods are of almost equal importance in controlling street openings, and each is described in the following sections of this report.

1. Issue a permit for each street opening. All plumbers, contractors, utility companies, and city departments should be required to apply for a permit before opening any city street or alley. Permits should not be transferable and should apply to a single job. The application for permit should show the location, kind, estimated

size, and purpose of the opening and should include copies of plans and specifications (except for lateral service branches) to be checked against city specifications and current maps of the area.

Fifteen of the 19 cities surveyed require written permits for street openings. Of the four cities not requiring permits, Ocala, Fla., and Martinsville, Va., issue an informal oral permit. In Enid, Okla., no permit is required, but those making openings are urged to notify the city. Ironwood, Mich., operates all of the utilities and therefore makes all pavement openings.

Six cities restrict issuance of permits to licensed or bonded plumbers or contractors: Culver City, Calif.; La Junta, Colo.; Ocala, Fla.; Lexington, Ky.; Rapid City, S. D.; and Falls Church, Va.

2. Require the applicant to pay all costs in advance. The permittee should pay all costs connected with issuing the permit, inspection of the work, and restoration of the pavement. General taxpayers should not be required to pay for street damage resulting from the operations of individuals or utility companies. Ten cities reported a fee for issuance of the permit. Five of these cities charge a flat amount ranging from \$15 to \$25, and the other five base the amount on the area of the cut and the type of pavement.

Requiring payment of the entire fee in advance relieves the city of billing and collecting costs and insures the proper replacement of the surface. This requirement may be relaxed or modified under certain circumstances: (1) a contractor working for the city may proceed with the work and portion of the contract price withheld until streets are restored or payment is received; (2) a city department may be billed as work progresses; and (3) utility companies and plumbers may make an annual deposit for streets restoration work and replenish the deposit from time to time at the request of the city.

3. Establish written specifications and inspect all street work. The city should establish written specifications to assure that the work of cutting the pavement, bedding the pipe, and back filling is done correctly. Inspection of all aspects of the work is also necessary if the city is to have complete control of the streets.

Eleven cities surveyed have written specifications for controlling pavement openings. Some of these are detailed, setting out requirements for cutting the pavement, storing the excavated material, bedding the pipe or conduit, tunnelling and jacking pipe under the street, backfilling the opening, and placing the temporary or permanent surface. Actual specifications for the work may vary widely from city to city chiefly because of soil differences. Some cities, for example, require puddling or jetting to settle the backfill while others expressly forbid this practice.

Most of those cities with detailed specifications also require city inspection of all work. In some cases, for example, the contractor must notify the public works department before starting work so that an inspector can be on hand as work progresses. In smaller cities, fewer individuals or companies open streets, and inspection is more informal; the city engineer or street superintendent may do most inspection work personally and soon learns which contractors will do the work correctly.

4. Use city forces to restore pavements. Ordinarily, the public works department should do most pavement restoration work even if pavement cuts are made by city-owned utilities. The individual who installs a connection or water meter may be an expert plumber, but he is never a highway engineer. His only interest is in getting

his particular utility installed and in operation, and he is not too concerned with the condition in which he leaves the street.

Cities sometimes make the permittee responsible for the maintenance of pavement restorations for a period of one year, and this requirement can be enforced when a deposit is required. The public works department is the agency held responsible for the condition of the streets and should have the principal responsibility for repairing and restoring pavements.

In 13 cities the city ordinarily does all pavement restoration work while in the other six cities the contractor replaces the pavement, in most cases to city specifications. In five of the 13 cities reporting that they do the pavement restoration work, the contractor may replace the surface, with city inspection, if he has the necessary crews and equipment.

5. Notify utility companies and adjacent property owners in advance of plans for street construction. The utility companies should be notified of construction or resurfacing plans in advance so they can relocate or replace their underground structures and extend services to new customers. Property owners should be notified at the same time so that they can make necessary changes and connections. Such a policy protects the new pavement and extends its life. A pavement that is cut too often cannot be restored to its original condition.

A total of 15 cities notify the utility company and the property owner before construction with a request to make the necessary changes before work begins. In Rapid City, S. D., the city extends all utility connections to the property line if the owner fails to do the work.

In Ocala, Fla., the state road department required relocation of all utilities before a new four-lane highway was built through the city. The city-owned water and sewer departments installed duplicate mains on either side of the new roadway and the other utilities made arrangements to serve the properties from the alley. All utility pavement openings were thereby avoided.

6. Restrict the opening of newly constructed streets. It is necessary to restrict the openings in new pavements and to charge a penalty for all openings within a certain period of time in order to protect the city's investment. Many of the smaller cities reported that such a procedure was unnecessary since the utilities cooperated with the city by making the necessary adjustments before construction on the street begins.

Street openings should be prohibited for a three-to-five year period after new construction and allowed only in emergencies with payment of a penalty in addition to the regular fee. Des Moines, for example, charges a penalty of \$25 for openings within two years of construction. Cincinnati prohibits street openings for a three-year period after construction except with special permission from the city manager and when the public health or safety is endangered. A penalty of 2 per cent of the regular charge is assessed for each month of the three-year restricted period remaining. The Detroit city charter requires notification of utilities in advance of construction and assesses a penalty for opening a new street equal to three times the restoration cost during the first year and twice the restoration cost during the second. No permits can be issued to open a boulevard without approval by the city council.

Cincinnati Rules for Control of Street Openings. The Cincinnati rules and regulations for the control of street openings are the most comprehensive of any reviewed for this report. City ordinances require a permit to open any streets or public ways,

provide that the public works department will restore pavements in most cases, and call for notices to the property owners and utilities prior to any paving or resurfacing.

Rules and regulations prepared by the public works director and approved by the city manager supplement the ordinances and spell out in detail the procedures for obtaining permits and specifications for cutting the pavement. Permits are issued by the public works department for all street openings including those made by city departments.

The permit application includes the exact location and dimension of the opening, the purpose, kind of pavement, and the approximate date the opening will be made. If the work is not completed within the time designated on the application, the permit is cancelled. Applicants are required to submit three copies of plans which show all existing underground structures at the site and the location of the proposed additional structures. Applicants are not required to submit plans for service branches.

Restoration costs must be paid before the permit is issued. In most cases, the applicant must make a cash deposit to cover the pavement restoration and inspection costs. Under certain circumstances, this may be modified: (1) plumbers and building contractors may open a running account with an initial deposit and replenish it from time to time as openings are made; (2) a contractor working for the city need not make a deposit if pavement restoration work keeps pace with trench work, but all restoration charges must be paid before the city makes final payment to the contractor; (3) a city or county department is billed as work progresses; (4) a utility operating under a franchise may do its own restoration work with city inspection as long as restoration keeps pace with openings, inspection charges are promptly paid, and a guarantee deposit is maintained.

Permittees are required by the city of Cincinnati to provide barricades, lights, and flagmen as necessary. The contractor is responsible for requesting police assistance to reroute traffic in case of congestion. The police and fire departments are notified a day in advance of the opening of a minor street and a special notice is sent to all interested departments before work starts on a main thoroughfare.

City specifications cover the work of back filling the trench, tunnelling, temporary resurfacing, and permanent restoration of pavement. The city has several inspectors who inspect all phases of the opening and restoration for conformance to city specifications and check the permit for location, type of work, and time of start and completion.

Charges for restoration are revised from time to time as experience warrants. Foremen in charge of restoration work keep time and material records for each job, and charges are developed from these records. The charges are established by standard work unit costs for different types of pavements and sizes of openings.

Control of Curb Cuts. Regulating curb cuts for driveways is a part of controlling streets. Improperly designed and constructed driveways can be a hazard to pedestrians, eliminate considerable curb parking space, and impair proper drainage of storm water. Sidewalks are intended for pedestrian use and when vehicular traffic is permitted to use them, damage to the surface is inevitable and is an open invitation for law suits against the city.

The city should require a permit to cut the curb, much the same as the permit to open the street, and establish a uniform policy on such items as: (1) the number and maximum width of driveways per lot; (2) standards for driveway design; (3) setting

of grade for driveways; (4) protection of the gutter flow line; (5) paving of the area of the driveway between the sidewalk and the curb; and (6) inspection of the work and collection of charges. Courts generally will uphold the right of cities to require permits, establish standards, enforce them by inspection, and make a reasonable charge for the work. Cities cannot deny property owners ingress and egress from their property, and standards will vary with cities.

MIS Report No. 20, "Regulation of Curb Cuts and Service Driveways", has a more detailed discussion of various standards and reviews the ordinances of Kenosha, Wis.; Kalamazoo, Mich.; Dayton, Ohio; and Winnetka, Ill.

Control of Sidewalks. The safety of pedestrians and ease of access to adjacent properties make sidewalks necessary. Cities generally have authority to construct and repair sidewalks, using one or more methods: (1) construction by city out of general revenues, (2) construction by abutting property owner at his own expense, and (3) construction by the city and cost assessed to the property owner.

The main elements for city control over sidewalks include: (1) a permit to construct or repair a sidewalk, (2) city specifications for materials and design, (3) city determination of grades and set back, (4) city inspection of work, (5) city authority to order repair of sidewalks, and (6) city subdivision regulations requiring installation of sidewalks before approval of the plat.

MIS Report No. 93 has a detailed discussion of sidewalk construction and financing methods and reviews the practices of 36 cities over 100,000 population with respect to sidewalk construction and repair policies.

Establishing a Local Policy. Three steps are necessary to establish complete city control of the streets: (1) an ordinance reserving control to the city, (2) rules and regulations supplementing the ordinance, and (3) internal procedures for routing and approval of permits. In addition, all utility franchises should contain clauses reserving control of the streets to the city and requiring the utility to conform to all city ordinances and regulations when placing or repairing utility structures. Specific suggestions are:

1. The ordinance should require that anyone desiring to open a street, construct a driveway or sidewalk, or cut the curb must obtain a permit from the appropriate city department. It will indicate any exceptions to the general rule, prescribe the qualifications of permit applicants, indicate the information to be submitted with the application and prescribe penalties for cuts in new pavement. The city manager or public works director should be responsible for developing rules and specifications and for issuing permits in all but exceptional circumstances.

2. Such an ordinance will be supplemented by rules made or approved by the city manager to put the policy into effect. The rules should include procedures for issuing permits and making inspections; specifications for cutting and restoring the pavement, installing pipes and structures, and making water and sewer taps; and a schedule of charges.

Charges for the issuance of permits, inspection of works, and pavement restoration should be reviewed periodically and changed to conform to actual costs. The rules governing street, driveway, curb, and sidewalk permits should be put into permanent written form and furnished to interested parties upon request.

3. Some administrative procedures will be necessary to control the operation within the city organization. Permits will be issued by or at the request of the

public works director or city engineer, and copies of the permit or separate memoranda should be routed to the inspectors and the division responsible for pavement restoration. The police and fire chiefs and other interested city officials should be notified in advance for major jobs involving mains, conduits, and industrial connections. Before the permit is finally approved and issued, the design and location should be checked against existing underground structure maps maintained by the city engineer. New structures and relocations should be noted on the engineer's permanent maps. Street improvements should be planned well in advance of construction so that property owners and utilities will have the time necessary to comply with any requirements.

All money collected for permits should be routed to the finance department the same day. Deposits should be credited to an account set up for that purpose and materials, supplies, labor costs, and refunds should be charged to it. Actual cost figures need not be developed for each job but foremen in the field should keep the time and material records to derive costs. Charges and costs should be compared periodically to check the adequacy of the charge to cover all expenses of restoration and inspection.

Note: MIS has available for loan to subscribing cities: (1) rules and regulations governing openings in streets and public ways of Cincinnati, Ohio; (2) street opening ordinance of New Brighton, Pa.; (3) League of Oregon Cities report on curb cuts and service driveways; (4) Wichita, Kan., driveway ordinance; and (5) sidewalk ordinances of Denver, Colo.; Winnetka, Ill.; and Sweetwater, Tex.

Grateful acknowledgment is made to the following officials who reviewed a tentative draft of this report and offered helpful suggestions: Herbert D. Fritz, city manager, Lexington, Ky.; Frank A. Howard, resident engineer, Virginia department of highways, Salem; and R. G. Sarvis, director, department of public works, Cincinnati, Ohio.

POLICIES FOR STREET OPENINGS IN 19 CITIES

City	Permit Required	Fee or Deposit	Pre-qualifi- cation for Applicants	City Specifi- cations	City In- spection	City Forces Must Replace Pavement	Utilities Notified of New Paving	Penalty for Pave- ment Cut
Culver City, Calif.	yes	yes*	yes*	yes	yes	yes	yes	no
Lynwood, Calif.	yes	yes*	...	...	yes	yes	yes	no
Salinas, Calif. *	yes	yes*	...	...	...	...	...	...
La Junta, Colo.	yes	...	yes*	...	yes	yes	yes	no
Ocala, Fla.	yes*	no*	yes*	...	yes	yes	yes	no
Des Moines, Iowa	yes	yes*	...	yes	yes	yes	yes	yes*
Hays, Kan.	yes	no	no	yes	no	yes*	yes	no
Lexington, Ky.	yes	yes*	yes*	yes	yes	yes*	yes	no
Mansfield, Mass.	yes	...	...	yes	...	no	yes	...
Ironwood, Mich.	...*	...	...	...	...	yes	...	...
Cincinnati, Ohio	yes	yes*	...	yes	yes	yes	yes	yes*
Enid, Okla.	no*	no	no	...	yes	no	yes	no
Rapid City, S. D.	yes	yes*	yes*	no	no	yes	yes*	no
Avalon, Pa.	yes	yes*	...	...	...	yes*	...	...
New Brighton, Pa.	yes	yes*	...	yes	yes	no	...	...
Marshall Tex.	yes	no	no	yes	no	no	yes*	no*
Brattleboro, Vt.	yes	no	...	yes	...	...	yes	no
Falls Church, Va.	yes	yes*	yes*	yes	yes	yes*	yes	no
Martinsville, Va.	yes*	no	...	yes	yes	yes*	yes*	no

Asterisks (*) refer to individual city footnotes on page 732.

Footnotes to
Policies for Street Openings in 19 Cities

- Culver City, Calif.: fee is figured by size of opening plus inspection; minimum fee--\$10. Applicants must be registered contractors.
- Lynwood, Calif.: \$.30 per sq. ft. for macadam; \$.50 per sq. ft. for concrete or asphalt cement. Concrete cuts must be made with a saw.
- Salinas, Calif.: City is now revising and extending its policy to cover inspection and city restoration of cuts. \$.50 per sq. ft. for paved or macadam surface; \$.10 per sq. ft. for all other; minimum fee--\$1.
- La Junta, Colo.: Only licensed plumbers or utility companies may open streets.
- Ocala, Fla.: Informal permit only. Only bonded firms can open pavings. Applicants must be licensed and bonded contractors.
- Des Moines, Ia.: Deposit of \$10 for opening brick or concrete pavement; \$15 for high-type asphalt pavement; \$6 for low-type asphalt; and \$1 for excavating in a parking or in a dirt street. Penalty of \$25 for opening a street within two years after completion of new pavement.
- Hays, Kan.: Plumbers and utility companies may restore the pavement, but the practice is not encouraged.
- Lexington, Ky.: \$25 deposit for pavement cut; \$10 for sidewalk cut. Franchised utilities do not make the deposit. Permits issued only to licensed plumbers and contractors and franchised utilities. Permittee may restore pavement if it is done to city specifications by a qualified contractor.
- Ironwood, Mich.: City owns all utilities and makes all pavement cuts.
- Cincinnati, Ohio: Applicant must make cash deposit equal to cost of work. Penalty of 2 per cent of cost for each month remaining on three-year restricted period.
- Enid, Okla.: No permit is required, but everyone is requested to notify city.
- Rapid City, S.D.: \$3 per sq. yd. for bituminous pavement; \$8 per sq. yd. for concrete. City makes preliminary cut in concrete pavement with concrete saw. Only licensed ditching contractors and pipe layers can open streets. For new construction, city is empowered to run utility connections to the property line and charge owner if he fails to do the work.
- Avalon, Pa.: \$50 for opening a paved street; \$15 for unpaved street or alley. City backfills and restores pavement.
- New Brighton, Pa.: \$1 for each permit and \$1 for inspection.
- Marshall, Tex.: On resurfacing jobs, utility connections must be placed for all vacant properties and faulty lines replaced. Utilities are required to lay duplicate lines in the parking, and permits are not issued for connections after pavement is completed.
- Brattleboro, Vt.: City restores pavement only when contractor doesn't have satisfactory crews and equipment.
- Falls Church, Va.: \$25 fee for plumbers and contractors only who must be licensed by city. Gas company has necessary facilities and restores pavement.
- Martinsville, Va.: Oral permit only. Utilities may restore pavement if they desire. City utility franchise requires gas and telephone companies to make necessary changes for new street construction.